

✓ Hanks, (H. J.)

REMARKS

UPON

PERI-UTERINE CELLULITIS

AND

Peri-Uterine Peritonitis.

BY

H. T. HANKS, M.D.,

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REPRINTED FROM ALBANY MEDICAL ANNALS.

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REMARKS UPON PERI-UTERINE CELLULITIS AND PERI-UTERINE PERITONITIS.*

BY H. T. HANKS, M.D., NEW YORK.

I wish to speak of peri-uterine inflammations, a class of diseases which have specially interested me during the last fourteen years; and, with the experience which comes from a somewhat extensive practice, I shall call your attention afresh to their importance, and, I trust, succeed in interesting you.

I shall not enter into an elaborate and careful study of the *history*, or *pathology*, of peri-metric inflammations, but shall rather speak of the present knowledge we possess of the diagnosis, prognosis and treatment of peri-uterine peritonitis, and peri-uterine cellulitis. By the term "peri-uterine," I refer to those diseases which occur in the peritoneum and cellular tissue which surrounds and lies adjacent to the uterus, and which are, by some authors, classified under the heads of †"Peri-Metritis," and "Para-Metritis," by other authors as ‡"Pelvic Peritonitis," and "Pelvic Cellulitis."

For myself, I doubt the possibility of properly or correctly expressing the difference of these two diseases by the use of the two Greek prefixes, *peri* and *para*. As the former, *peri*, means "about, on all sides of," and "round about," conveying the idea of completeness; while the latter, *para*, means "by," or "near by," "adjacent to," "along-side of." It is seen at once that the distinctions, or differences, between these two prefixes are insufficient to express the important differences of the diseases, besides being too similar in sound. And, moreover, the prefix, *peri*, covers and includes the meaning of *para* when applied to these

* President's Address before the Alumni Association of the Albany Medical College, March 4, 1885.

† Virchow, Matthews Duncan, Bernutz, Tilt, Lusk and others.

‡ Thomas, Emmet, Brown, Grailly Hewitt, Priestly.

diseases. I shall, therefore, use the terms which are used by many good authorities, and which mean to me exactly what the words express, and cause no confusion of ideas by similarity of sound.

By "peri-uterine peritonitis," I mean the inflammation of that portion of the peritoneum which covers the fundus uteri and the bladder, forms the broad ligaments, and dips down between the uterus and rectum to form Douglas' pouch. By "peri-uterine cellulitis," I mean the inflammation of any portion of the cellular tissues below the peritoneum, around the cervix and vagina, under the broad ligaments, between the bladder and uterus, between the uterus and rectum, and between the vagina and rectum. This tissue, termed by some the "padding" of the pelvic organs, is the bed of numerous blood-vessels and nerves; and by its remarkable capacity of expansion and contraction is peculiarly well adapted for the purposes of support to the pelvic organs, and is susceptible to inflammations from various causes, either septic, or traumatic. These diseases of the female pelvic organs are far more common than many of us have formerly supposed. Frequently I am called in consultation to see one or two such cases in a day. I judge that my experience is similar to that of other physicians. At the Woman's Hospital nearly one-half of all the patients who are admitted for minor operations, and many of those for major operations, are obliged to be placed under preliminary treatment, for from two to twelve weeks, for some existing form of peri-metric inflammation. Dr. Emmet* says: "I do not exaggerate when I claim that this disease" [meaning chronic cellulitis and peritonitis] "is by far the most important one with which woman is afflicted. It is the most common, and becomes the most important in being *comparatively seldom recognized*."

I have selected this subject to-day, because I feel that my experience may help those who have had less, to discover these inflammations, and institute measures for their cure.

Anatomy.—The peritoneum, which forms the floor of the abdominal cavity, of course constitutes the roof of the pelvic cavity. It can best be understood, by one who has not examined these parts in the dead-house, by supposing the peritoneum to be stretched loosely across from the pubes to the junction of the second and third bone of the sacrum. It covers the fundus

* Emmet's Gynecology, p. 256.

of the bladder, and the fundus and the anterior face of the body of the uterus, nearly down to the vaginal junction, and, spreading from the fundus on either side, constitutes the broad ligaments; while the posterior face of the uterus is covered still further down than on the anterior face,—much further than the plate we formerly studied represented. It then passes upward and forms the Douglas' cul-de-sac; then, with thickened folds, it passes on either side of the rectum to its attachment to the sacrum, as mentioned above. These thickened folds constitute the utero-sacro ligaments. Some fibres of this portion of the peritoneum, in this locality, are attached to the anterior wall of the rectum; the remainder pass on either side of the rectum, and are attached to the sacrum, as mentioned above. The arteries which supply blood to the pelvic organs, are the hypogastric, uterine, vesical and pudendal. They are very numerous, especially near the uterus and under the folds of the broad ligaments, and they anastomose freely, so that the supply of blood is always abundant. The veins are large, tortuous and abundant, and without valves. There is a close anastomosis of the veins of the uterus, broad ligaments, bladder, rectum and pudendum. This explains the intimate sympathy and relation one organ bears to another when diseased, and also how quickly the uterine and adjacent cellular tissue become engorged and congested with blood from constipation and sedentary habits. And we can realize the effect of this intimate anastomosis of veins, and arteries, when we remember how quickly these congested organs are often relieved by a brisk cathartic. The lymphatics and nerves, too, are equally abundant, with perhaps the exception of the distribution of the nerves around the cervix, where they are found less numerous.

By *peri-uterine cellulitis*, we mean an inflammation of the cellular tissue immediately adjacent to the uterus. Grailly Hewitt defines it as “an effusion of morbid products into the space surrounding the uterus, * * underneath the ovaries, and broad ligaments.” Its actual seat is the cellular tissue surrounding the uterus, between the folds of the broad ligaments, and extending from the uterus towards the pelvic wall in various directions. It may be general, or, as is often the case, quite local, involving the tissue near the cervix, to the left or right, and, when chronic, only indicated by a sense of induration and thickening of the tissues in this locality. It may be back of the vagina, in front of rec-

tum, and constitute a well-marked, circumscribed phlegmon, movable, tender, throbbing from the pulsations of the numerous small arteries tightly fixed in its meshes. It may be situated still further down, involving the cellular tissue in the perineum. In such cases, we find a swelling, attended with great pain, throbbing, induration and heat, in this locality, as is always present before an abscess forms here. Such an abscess, opening through the perineum, generally becomes a fistula in ano; when it ruptures into the vagina, it generally ends in a recto-vaginal fistula. We have all seen such results. Sometimes this cellulitis is in the tissue immediately surrounding the cervix uteri; and then there may be so much effusion as to crowd the vagina downwards, towards the plane corresponding to the *os externum*, thus creating a suspicion that there is little, or no *vaginal* cervix.

The disease is more common on the left, than on the right side; due undoubtedly to the facts (1) that the circulation is more free on this side; (2) the rectum being situated here, the parts are more frequently disturbed by the passage of hardened faecal matter.

Grailly Hewitt thinks that the larger part of his metric inflammations are outside the peritoneum. Other authors believe the peritoneum is almost always involved whenever the cellulitis is above the floor of the vagina.

The causes of peri-uterine cellulitis may be, and are, very varied. The most common are great exposure and sudden colds during menstruation, over-work or exercise during menstruation; sexual indulgences while congestion from menstruation; or from a lacerated cervix, exists; any violent or sudden emotion, or exertion during the menstrual flow; the absorption of septic matter from any source. Grailly Hewitt, Schroeder, and Matthews Duncan consider this disease as more frequently than otherwise, a post-puerperal condition.

The irritation of unsuitable pessaries may constitute another cause. Criminal abortion, with its attending train of pathological results, is another cause.

One thing, in this connection, it is well for us all to remember, viz., that, from a *very insignificant cause*, may arise an extensive peri-uterine cellulitis, extending into peri-uterine peritonitis, then general peritonitis, and death.

The *initial symptoms* of *peri-uterine cellulitis*, are almost invariably a chill, with its succeeding fever. Then follows pain and

tenderness in the region of the inflammation. Frequently the disease is ushered in with only a chilly sensation, attended with nausea and vomiting. There is generally dysuria and a frequent desire to pass urine; then there will be painful defecation, general distress, and weighty sensation in the loins, sometimes with retraction of thighs, especially when the inflammation is near the iliac, and psoas muscles, and suppuration is imminent. The temperature will be increased, often reaching at first 104° to 105° . The pulse is correspondingly accelerated, and will range from 110 to 140. There will be tenderness of the abdomen, and frequently the weight of the clothes is insupportable. These symptoms are far more marked and positive, when the cellulitis has become extensive, involving the pelvic peritoneum. On examination, per vaginam, the patient lying upon her back, we find in the acute stage, an exquisitely sensitive condition of the parts, a sense of increased heat, and a certain baggy condition, which is quite unnatural, and quite characteristic of the beginning of effusion. However, the knowledge to be gained by the sense of touch, will vary greatly, according to the stage of the disease. In its more chronic form, it can *only* be determined by a physical examination, and will then be recognized by the sense of fullness and induration, and more, or less, fixation of adjacent tissue.

Diagnosis.—The diagnosis is usually made by obtaining first all the subjective symptoms possible, from the patient's history of her case. If she has had a chill, or has vomited, or has tenesmus without diarrhœa, or strangury, or excessive pain in pelvis, or complains of great heat in this region, and other symptoms, which I have already described, exist, a careful vaginal examination is indicated, and should be made. The index finger of either hand, thoroughly disinfected and anointed, may be carefully introduced into the vagina, and will discover the amount of tenderness existing, and any induration, or swelling of the cellular tissue around the uterus, around the cervix and below the broad ligaments. The swelling will be hot and tender, sometimes quite movable, sometimes fixing the uterus, or crowding it from the median line. This swelling may be hard, cedematous, or fluctuating. The physician, who would correctly diagnose this disease, must bear in mind that in health, the vagina is elastic and normal in temperature, and that no indurated tissue exists; also, that in health, the uterus is perfectly, and painlessly movable.

If all these symptoms of the disease be revealed by the vaginal examination, and we find the pelvic roof *not* indurated, nor affected, we have the strongest evidence that the disease is *cellulitis*.

Differential Diagnosis.—There are, however, certain other diseases and conditions, which may be mistaken for cellulitis. Among these is extra-peritoneal pelvic hematocele. To differentiate these two diseases, it must be remembered that the latter, hematocele, is usually much more sudden in its onset, is attended with a greater shock to the patient, often causing faintness; the induration is less painful to the touch, and more circumscribed; is attended with less fever, until a certain amount of cellulitis is set up around the escaped blood. When this condition exists, we cannot, with certainty, differentiate a common cellulitis from a cellulitis surrounding an hematocele. In these cases the bleeding is seldom so excessive, or alarming, as the blood has to dissect for itself the circumscribed cavity which is to inclose the blood, and constitute the hematocele. Therefore, it is of no material consequence, at this stage, if we are *not* able to determine whether the cellulitis envelopes an hematocele, or not, as we have to treat the two conditions exactly the same. One other condition may be taken for a peri-uterine cellulitis, and this mistake is an exceedingly mortifying error of diagnosis, but one which has often occurred. Two different patients were sent to me, by two different physicians, for treatment for a phlegmon in the posterior vaginal wall. A rectal examination proved the large, hard, circumscribed phlegmon, in both cases, to be only impacted fæces, amenable to treatment with saline cathartics. Impacted fæces need never be mistaken for peri-uterine cellulitis, if a thorough *rectal* examination be made, which should *always be done, whenever any possibility of error exists*.

Uterine retroversion, or flexion, may be mistaken for cellulitis. These conditions can easily be appreciated and differentiated. If a sound can be introduced into the uterine cavity, it determines at once the position of the organ. If, after careful efforts at reduction, the patient being in the knee-chest position, the tumor still remains unchanged, then there is, together with retroversion, a peritonitis, or cellulitis, in this locality, which requires, and *must* have, the usual treatment before the displaced organ will assume its normal position.

Prognosis.—In no other class of diseases is there more fault-finding with the physician in charge, than in these same pelvic inflammations, and the cause of the patient's distrust of the physician's ability is due, in great part, to his *errors* in prognosis. An exact diagnosis, and an appreciation of the pathological conditions, will enable the physician to render a more nearly exact prognosis. He must know *positively*, by careful examination, the *exact* locality of the phlegmon; whether it be a circumscribed cellulitis, and its limitations; if it be entirely *below* the peritoneum; if it be near suppuration; if treatment will hasten resolution, or suppuration; and if it will require weeks, or months, for either result. He must remember that these inflammations, and indurations of the vagina, which seem to be firmly attached to the cervix, at the seat of a laceration of this part, or a cellulitis, which lies under the folds of the broad ligaments, and around the ovary, or Fallopian tube, *must* take a much longer time for cure, than those which are more remote from the uterus and peritoneum. For there is always a possibility that the periodical congestion of the menstrual period, may light up afresh, any existing inflammation contiguous to the uterus and ovaries.

Treatment.—Whenever this disease is discovered and recognized, in the first stage of its acute form, the patient should be made to assume, and remain in the recumbent posture. She should take such laxatives, daily, as will act freely, and produce semi-liquid evacuations. She should have frequent, and copious vaginal douches of warm water and borax, or warm flaxseed tea. If the swelling and pain are excessive, leeches may be applied, as near as possible to the seat of the trouble. Anodynes, to insure sufficient rest, are necessary. Rectal suppositories of opium are useful. Only moderate quantities of easily digestible food should be allowed. When suppuration has taken place, the pus must be afforded an exit, at such point as will be easiest, and safest, and least likely to remain a fistulous opening.

The *chronic form* of peri-uterine cellulitis comes most frequently under the treatment of the specialist, for the reason, that the acute form is always attended with such grave, and positive symptoms, that the family physician is summoned, who discovers the disease, and continues in attendance while the more alarming symptoms remain. But in the chronic form, which is often found existing around the cervix, and underneath the broad liga-

ments, the family physician often overlooks the source of distress, and endeavors to fit a pessary for some fancied, or real, displacement or flexion of the uterus; or he proceeds to operate for a slight laceration of cervix, or ruptured perineum, with very unsatisfactory results. The patient, finally discouraged, comes under the care of the experienced gynecologist, and the exact condition is, for the first time, discovered and successfully treated. This chronic form of cellulitis requires less heroic treatment than the acute form, but far more persistent. In the vast majority of cases the general condition of the patient has to be improved. Tonics of Peruvian bark, iodide of iron, mineral acids, etc., are often required, and should be as earnestly insisted upon as any local treatment. The bowels should be moved daily, as in the acute stage. Local treatment, while any induration exists, is necessary every third or fourth day, except during the three days preceding the menstrual flow, during the flow, and for two or three subsequent days, to avoid the danger of increasing the accompanying congestion at that time. The local treatment should consist of applications of Churchill's, or the compound tincture of iodine, to the parts near the induration. The patient should also be enjoined to faithfully use vaginal douches, daily, of two, and even four quarts of warm water, and also to remain in the recumbent posture for one hour after the douching. After the application of iodine, a pad of cotton, with string attached, soaked with glycerine, or a poultice of flaxseed meal and slippery elm bark,* should be applied, and held in place with dry pads of cotton, well packed in the vagina. I use poultices, in preference to the cotton and glycerine pads, in more recent cases, where there is great tenderness, and considerable effusion to be absorbed. In these cases, and especially where some peritonitis exists, besides the cellulitis, I insist upon the patient living separate from her husband, and refraining from sexual intercourse for a time. I find that the patients in the Woman's Hospital, as a rule, recover far more rapidly, for this reason, than those who are treated at home, and who are obliged to occupy the same bed with their husbands.

Peri-uterine peritonitis is an inflammation of any part of the pelvic peritoneum. Dr. Emmet doubts if there is ever a peri-

* Poultices are made of a tablespoonful of pulverized slippery elm bark, flaxseed meal, or pulverized marsh mallow, and placed in the center of a piece of cheese-cloth six inches square, and a string tied tightly about the four corners. When soaked in hot water, it is ready to be placed in situ, and held with cotton pads, the same as glycerinized pads.

metric peritonitis *without* considerable cellulitis. One fact should be always remembered, that whenever the cellulitis extends *upwards*, there is more or less peritonitis, and when a severe peritonitis extends *downwards*, there is more or less cellulitis. An easily remembered and practical rule, but one not literally correct, in all cases, is to call all inflammations peri-uterine peritonitis, which seem to be *above* a plane drawn from the middle of the pubes to the middle of the third bone of the sacrum.

The causes of peri-uterine peritonitis must be, and are, much the same as those which cause cellulitis, and have been previously enumerated. The puerperal state, of course, is a very frequent cause, and we may find a chronic peritonitis existing for weeks, and months, after parturition. Gonorrhœa, extending from the vagina to the uterus, and through the Fallopian tubes, is another source of the disease; also the rupture of small cysts of the ovaries, and Fallopian tubes. Excessive hemorrhage from the Graafian follicles, during the menstrual epoch, and the escape of some of the blood into the pelvic peritoneal cavity, is one cause. Undue traction on the uterus, during operations on the cervix, has been reported as a cause in several cases. One such case occurred in my own practice. Poisoning by septic matter from imperfectly cleansed sounds, or instruments, may be one cause. Matthews Duncan thinks that a vast majority of these cases of peri-uterine peritonitis are due to metritis, or catarrh of the endometrium, or the Fallopian tubes. The latter, salpingitis, with hydro- or pyo-salpinx, is undoubtedly a most fruitful cause, as I have often had opportunity to verify at the autopsy.

Symptoms.—The subjective, and many of the objective symptoms of peri-uterine peritonitis, are the symptoms of cellulitis, only far more exaggerated and severe. Chill, fever, great local pain, vomiting, dysuria, generally diarrhœa, with tenesmus; excessive tenderness over the supra-pubic region; pain, often distinctly paroxysmal; often retraction of thigh;* local tympanitis. On vaginal examination, the uterus and broad ligaments are found to be fixed, and firmly imbedded and surrounded with adventitious exudation, or organized lymph. This plastic exudation into the meshes of the adjacent cellular and peritoneal tissue, causes the almost fibrous hardness of the pelvic roof. By

*Dr. Thomas thinks this does not occur in peri-uterine peritonitis, but I have seen two cases where this symptom existed, and was present at the autopsies, which revealed a peri-uterine peritonitis, with but slight cellulitis.

rectal examination, the finger, pushed far up, feels the exudation in Douglas' pouch, and, at the same time, touches the thickened, and exquisitely sensitive, utero-sacral ligaments. There is often great vaginal heat. When Douglas' cul-de-sac is early involved, often the anus and lower rectum are œdematous and swollen. There is also much tendency to neuralgia. The patient invariably desires to remain quiet, and upon her back.

Often, however,—and this fact I cannot too forcibly emphasize,—there is chronic peritonitis, or lurking peritonitis, when *not suspected by the patient*, and only discoverable by the physician, on a careful examination.

These chronic peri-uterine inflammations are just severe enough to keep the woman half an invalid, to cause sterility and dyspareunia. They are a constant source of danger in all operations for replacing the uterus, or restoring a lacerated cervix, and are a cause of much menstrual disturbance. Suppuration does not occur as often as in peri-uterine cellulitis, but in a vast majority of cases, where cellulitis ends in suppuration, there is more or less peritonitis. There will often be a slight, and sometimes quite considerable, flow of blood, of a venous character, from the uterus. This may last for three or four weeks, and is always present when the endo-metrium and Fallopian tubes are involved, as *is* especially the case in perimetric peritonitis, which follows an abortion.

Diagnosis.—In the acute stage of peri-uterine peritonitis, a diagnosis is easily made. In the more chronic stage, of a once severe form, it is less easy to determine the presence of the infiltration and fixation. Where only a slight fixation of the fundus uteri exists, or but a slight thickening of the tissue in the broad ligament is discovered, with but little tenderness, and with only a slight loss of elasticity in the tissue which constitutes the vesico-uterine septum, or only an apparently insignificant thickening and tenderness is found in the region of the utero-sacral ligaments, these conditions are too often overlooked by the physician, who has not fully learned their importance as a source of danger, when introducing a pessary, or using the sound, the scissors, or the needle.

There will generally be, in the first stage of acute peri-uterine peritonitis, the chill, or rigor, followed by fever; often nausea and vomiting; often diarrhœa and tenesmus; dysuria; great abdominal pain in region of fundus of bladder. There will be

the facial expression of great suffering and anxiety; the skin will be hot; the abdomen tender and tympanitic. The vaginal touch will reveal fixation, from effusion of plastic lymph, excessive heat and exquisite tenderness in and around the uterus and bladder, varying according to the *stage* at which the examination is made.

The differential diagnosis between peri-uterine peritonitis, and cancer of the uterus, or its appendages, is not always easy in the first stage of the latter. But in cancer the pain is more persistent, the onset of the disease is more gradual, but increases from week to week in severity, requiring daily more opium. In peritonitis, the pain *diminishes* in severity from week to week. The pain in cancer is more frequently in the sacrum, or Poupart's ligament, or the pudenda, or in the thighs. There is more profuse and alarming hemorrhage, if any, in cancer. There is more infiltration in inguinal glands. There is no hydrorrhœa in peritonitis, while in carcinoma uteri it is generally present. In the later, or ulcerative stage of cancer, no mistake of diagnosis need ever be made.

A prolapsed, cystic, or hypertrophied *ovary* may be mistaken for chronic peri-uterine peritonitis. But a diseased ovary is generally quite tender, movable and more circumscribed to the touch, and, in thin women, by bi-manual examination, it can be easily detected. Also, the periodical pain of the diseased ovary, before menstruation, would indicate its character.

Peri-uterine hœmatocele can be differentiated from peri-uterine peritonitis in the same manner as from peri-uterine cellulitis.

Prognosis.—The prognosis is good in the majority of cases, but the recovery is slow;—much slower than in peri-uterine cellulitis. When the cause of the peritonitis is believed to be inflammation, or severe catarrh of the Fallopian tubes, we must expect an occasional recurrence of the disease, until the catarrh of the tube is cured, or the tube removed. The operation for removal of tube or ovary should be resorted to only after months have been spent in the treatment for the cure of the inflammation, as very many cases *can* be cured, and *have* been cured in my own practice. Even Tait states that he has made one error of diagnosis in these cases, in *every ten patients*. When pelvic peritonitis is accompanied with more or less cellulitis, the course of the disease is very much slower, and the prognosis less favorable.

Treatment.—The treatment of peri-uterine peritonitis, in the

acute form, must be decided, or it is likely to run into general peritonitis, and become a truly formidable disease to manage. If called early, even before much effusion has taken place, we ought to *suspect* the disease, and prepare for it. Morphine, in sufficient quantities to allay all pain, should be administered hypodermically. Wet cups, or leeches, or a large fly blister, should be applied. In severe cases I should choose these remedies in the order named. If the temperature is high, I would apply an ice-bag, or ice water, in the coil, allowing it to remain upon the abdomen until the temperature is lowered to 101° at least. I would order opium by the rectum, or camphor and opium pills, *pro-re-nata*, sufficient to cover all pain; also quinine, according to the indications and general strength of the patient, or the malarial type which might be manifested. I would, or would not, use copious vaginal douches of hot water, according as they seemed alleviating or annoying, to the patient. When the temperature is reduced by means of the coil, quinine and opium, a warm flaxseed meal poultice, with oil of turpentine, will be an excellent application to the lower abdomen. When, from severe rigors, followed by perspiration and hectic, sup-puration is suspected, it is often a difficult matter to determine where the pus is located. In every case, where any uncertainty exists with reference to localizing the pus, the patient should be anæsthetized, and a most careful and thorough examination be instituted. After discovering its locality, it should be removed through the abdominal, or vaginal wall, as may seem most judicious at the time. The cavity of the abscess should be frequently cleansed with antiseptic fluids, in the usual manner, until entirely healed. To prevent closure of the track of the cavity, a drainage tube should be kept in position. When, however, the abscess ruptures spontaneously into the rectum, great difficulty will be experienced in healing the abscess, since the opening into the rectum is generally above the floor of the abscess, and consequently it is never completely emptied, and every effort at defecation stretches the sides of the fistula, and abscess, and prevents healing. In such a case the patient should be anæsthetized, the index finger should be passed up the rectum, as far as possible, in the endeavor to find the fistulous opening of the abscess into the rectum. If not successful, a long, narrow-bladed Sims' speculum should be introduced into the rectum, in the same manner as it would be into the vagina,

and, aided by the best possible light, search should be made with the eye for the fistulous opening. When discovered, a uterine sound, or strong silver probe bent upon itself, should be introduced into this opening, and the direction of the fistula carefully noted. The sound in situ, and the index finger introduced into the vagina, should be made to approach each other as nearly as possible. Then, in removing the finger, and noting the exact position which it occupied, a thermo- or galvano-cautery, or sharp, conical-shaped stillette, should be forced through until it touches the wire probe in the rectum. Thus the danger of hemorrhage from the wound is reduced to the minimum. In such a procedure, a drainage tube must be kept in situ for weeks. If this operation cannot be done, and the patient is losing ground, the abdomen must be opened, and the diseased tissue removed in the same manner as an ovarian tumor would be.

Experience has taught us, however, that operative interference in searching for pus, even with the aspirator, is dangerous. Explorative punctures for suspected pus should never be made, unless there is almost an absolute certainty of its existence.

The chronic form of peri-uterine peritonitis must be treated like chronic peri-uterine cellulitis. Frequent application of iodine, or blisters to the vagina, near the affected locality, may be necessary. Then the poultice, or cotton and glycerine pads must be used twice a week for months, together with the daily use of hot water, or hot sea-salt water, or chlorate of potash water, in copious vaginal douches. Warm sitz-baths are also efficacious.

When there is a constant recurrence of this disease, and it is reasonable to suppose it is due to chronic salpingitis and ovaritis, with all their accompanying complications, and consequent suffering, *the only* cure is removal of the exciting cause, by performing Battey's or Tait's operation.

To recapitulate, in conclusion, I would say that these peri-uterine inflammations are of frequent occurrence. The chronic forms of cellulitis, and peritonitis, are often overlooked by the general practitioner. The two diseases may exist at the same time, but in the primary stage of either, a correct diagnosis can, and ought to be made. Operations on the cervix for laceration of the same, careless introduction of sound into the canal, or undue force in the reduction of versions, or flexions, while either of these diseases is present, are fraught with danger to the patient,

and must be avoided. The acute forms of peri-uterine cellulitis, and peritonitis, require much the same treatment. The former ought always to be cured. The treatment of the latter, (chronic peritonitis), may be pursued for months with but little improvement, but it should be persevered in. In the majority of cases, the chronic form of peritonitis can be cured without resorting to the capital operation for removing the ovaries, the tubes, or the suppurating tissue.

